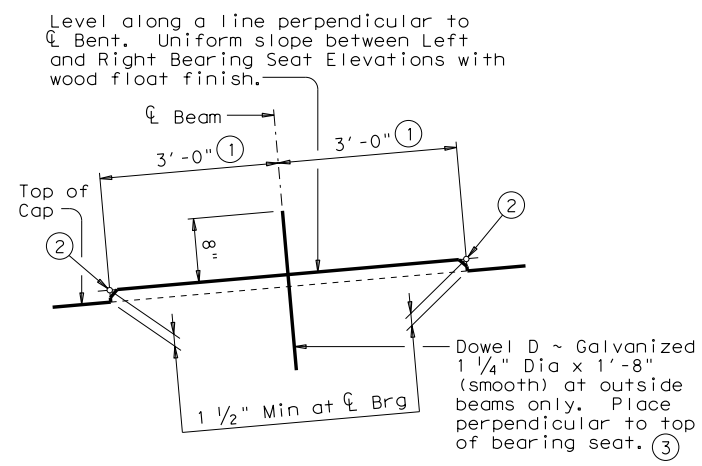
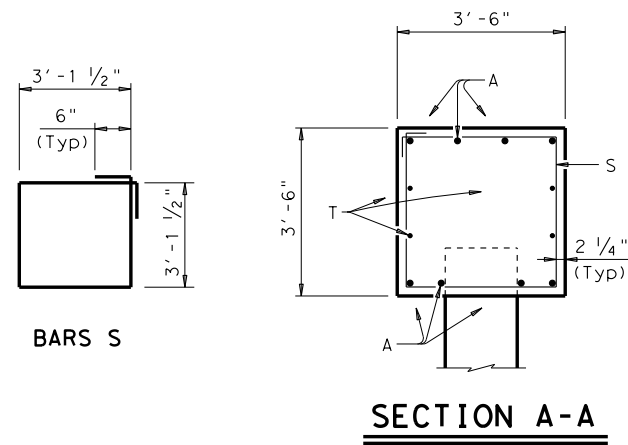


DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE: FILE:



**TABLE OF MAXIMUM ALLOWABLE EXPOSED PILE HEIGHTS AND PILE LOADS (5)**

Pile Type		Maximum Height	Maximum Load
Concrete	Steel	Ft	(Tons/Pile)
18" Sq	HP14x117 (6)	20	90
20" Sq	HP18x135	24	110
24" Sq	(7)	24	140

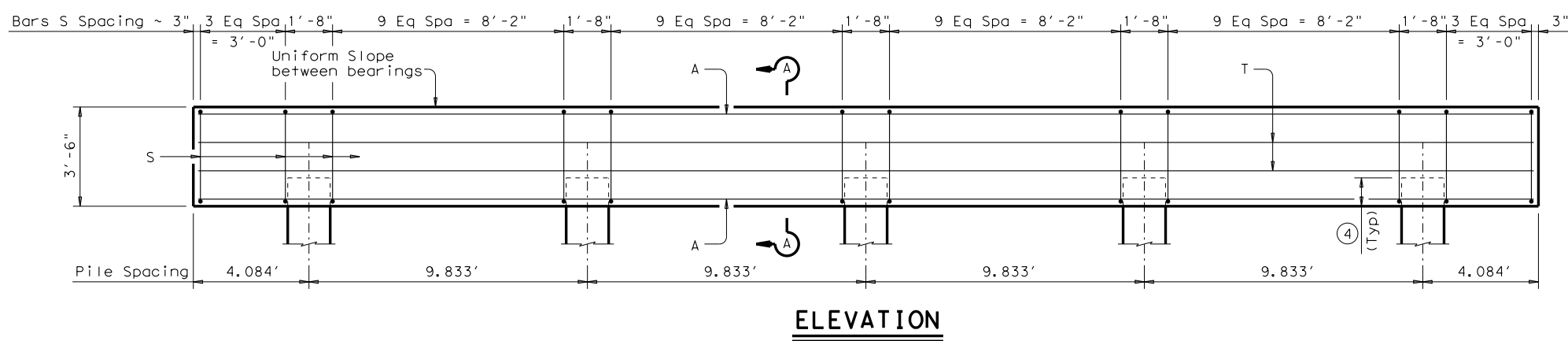
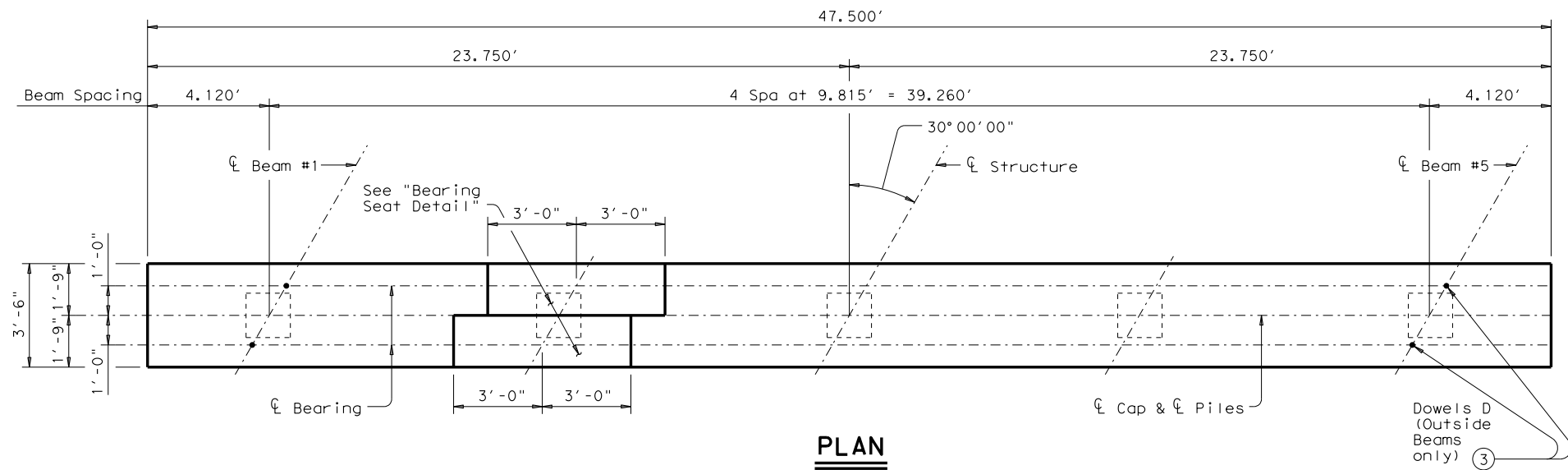
**FOUNDATION LOADS**

Span Average	Minimum Concrete Pile Size	5XB20 & 5XB28 X-Beams	
		Pile Loads	
Ft	In.	(Tons/Pile)	
40	18	71	
45		78	
50		84	
55	20	90	
60		96	
65		102	
70	24	108	
75		115	
80		121	

**TABLE OF ESTIMATED QUANTITIES**

**40' THRU 80' SPANS**

Bar	No.	Size	Length	Weight	
A	8	#9	47'-2"	1,283	
D (3)	4	1 1/4"D	1'-8"	28	
S	48	#5	13'-6"	676	
T	4	#5	47'-2"	197	
Reinforcing Steel				Lb	2,184
Class "C" Concrete				CY	22.0



- ① Measured along  $\phi$  of Bearing.
- ② Right and left elevations and locations are provided elsewhere.
- ③ Omit Dowels D at end of units. Adjust reinforcing steel total accordingly.
- ④ See FD standard.
- ⑤ In areas of very soft soil or where scour is anticipated, maximum allowable exposed pile heights shall be evaluated by the Engineer prior to use of this standard.
- ⑥ When HP14 x 117 steel piling is specified in the plans, the Contractor has the option of furnishing either HP14 x 117 or HP16 x 101 steel piling.
- ⑦ Where no steel HP section is shown, a suitable HP equivalent to the square concrete pile has not been evaluated.

**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Specifications.  
 For Bents supporting unequal spans, the shorter span cannot be less than 80 percent of the longer span.  
 These details are limited to an 80' maximum span length.  
 Concrete strength  $f'c = 3,600$  psi.  
 All Cap reinforcing must be Grade 60.  
 Galvanize dowel bars D.  
 See Bridge Layout for piling size and length.  
 See Foundation Details standard FD for all foundation details and notes.  
 Bent selected shall be based on the average span length rounded up to the next 5 Ft increment.  
 Details are drawn showing right forward skew. See Bridge Layout for actual skew direction.  
 These bent details may be used with Standard SXB-40-30 only.

HL93 LOADING

**Bridge Division Standard**

**INTERIOR TRESTLE BENTS**  
 TYPE 5XB20 AND 5XB28  
 PRESTR CONC X-BEAMS  
 40' ROADWAY 30°SKEW  
 BTXB-40-30

FILE: xbstde88.dgn	DN: JMH	CK: AM	DW: JTR	CK: JMH
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DIST		COUNTY		SHEET NO.